

# SEQUENCE LISTING

<110> Unger, Evan C.

<120> Charged Lipids and Uses For The Same

<130> UNGR1592

<140> 09/540,448

<141> 2000-03-31

<150> 08/925,353

<151> 1997-09-08

<160> 37

<170> PatentIn Ver. 2.1

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<220>

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<222> (4)

<223> X is azetidine

<400> 1

Trp Tyr Gln Xaa Tyr

1

5

<210> 2

<211> 12

<212> PRT

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<220>

<223> Description of Artificial Sequence: Novel Sequence

<220>

<221> UNSURE

<222> (7)

<223> X is azetidine

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<400> 2

Trp Pro Gly Trp Tyr Gln Xaa Tyr Ala Leu Pro Leu  
1 5 10

<210> 3

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Novel Sequence

<220>

<221> UNSURE

<222> (9)

<223> X is azetidine

<400> 3

Phe Glu Trp Pro Gly Trp Tyr Gln Xaa Tyr Ala Leu Pro Leu  
1 5 10

<210> 4

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Novel Sequence

<400> 4

Arg Gly Asp Ser  
1

<210> 5

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Novel Sequence

<400> 5

Gly Arg Gly Asp Ser Pro  
1 5

<210> 6  
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<220>

<223> Description of Artificial Sequence: Novel Sequence

<400> 6  
 Gly Pro Arg Pro  
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<210> 7  
 <211> 159  
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<223> Description of Artificial Sequence: Novel Sequence

<400> 7  
 Asn Lys Leu Ile Val Arg Arg Gly Gln Ser Phe Tyr Val Gln Ile Asp  
 1 5 10 15  
 Phe Ser Arg Pro Tyr Asp Pro Arg Arg Asp Leu Phe Arg Val Glu Tyr  
 20 25 30  
 Val Ile Gly Arg Tyr Pro Gln Glu Asn Lys Gly Thr Tyr Ile Pro Val  
 35 40 45  
 Pro Ile Val Ser Glu Leu Gln Ser Gly Lys Trp Gly Ala Lys Ile Val  
 50 55 60  
 Met Arg Glu Asp Arg Ser Val Arg Leu Ser Ile Gln Ser Ser Pro Lys  
 65 70 75 80  
 Cys Ile Val Gly Lys Phe Arg Met Tyr Val Ala Val Trp Thr Pro Tyr  
 85 90 95  
 Gly Val Leu Arg Thr Ser Arg Asn Pro Glu Thr Asp Thr Tyr Ile Leu  
 100 105 110  
 Phe Asn Pro Trp Cys Glu Asp Asp Ala Val Tyr Leu Asp Asn Glu Lys  
 115 120 125

Glu Arg Glu Glu Tyr Val Leu Asn Asp Ile Gly Val Ile Phe Tyr Gly  
 130 135 140

Glu Val Asn Asp Ile Lys Thr Arg Ser Trp Ser Tyr Gly Gln Phe  
 145 150 155

<210> 8  
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 <212> PRT  
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<220>  
 <223> Description of Artificial Sequence: Novel Sequence

<220>  
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 <222> (9)  
 <223> X is unknown

<400> 8  
 Asn Lys Leu Ile Val Arg Arg Gly Xaa Ser Phe Tyr Val Gln Ile Asp  
 1 5 10 15

Phe Ser Arg Pro Tyr Asp Pro Arg Arg Asp  
 20 25

<210> 9  
 <211> 41  
 <212> PRT  
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<220>  
 <223> Description of Artificial Sequence: Novel Sequence

<400> 9  
 Asp Asp Ala Val Tyr Leu Asp Asn Glu Lys Glu Arg Glu Glu Tyr Val  
 1 5 10 15

Leu Asn Asp Ile Gly Val Ile Phe Tyr Gly Glu Val Asn Asp Ile Lys  
 20 25 30

Thr Arg Ser Trp Ser Tyr Gly Gln Phe  
 35 40

<210> 10

<211> 9  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Novel Sequence

<400> 10  
Ala Arg Arg Ser Ser Pro Ser Tyr Tyr  
1 5

<210> 11  
<211> 10  
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<220>  
<223> Description of Artificial Sequence: Novel Sequence

<400> 11  
Gly Ala Gly Pro Tyr Tyr Ala Met Asp Tyr  
1 5 10

<210> 12  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Novel Sequence

<400> 12  
Arg Ser Pro Ser Tyr Tyr Arg Tyr Asp Gly Ala Gly Pro Tyr Tyr Ala  
1 5 10 15

Met Asp Tyr

<210> 13  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Novel Sequence

<400> 13

Ala Arg Arg Ser Pro Ser Tyr Tyr Arg Tyr Asp Gly Ala Gly Pro Tyr  
1 5 10 15

Tyr Ala Met Asp Tyr  
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<210> 14

<211> 69

<212> PRT

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<220>

<223> Description of Artificial Sequence: Novel Sequence

<220>

<221> UNSURE

<222> (40)..(41)

<223> X is any amino acid

<400> 14

Gly Glu Glu Cys Asp Cys Gly Ser Pro Glu Asn Pro Cys Cys Asp Ala  
1 5 10 15

Ala Thr Cys Lys Leu Arg Pro Gly Ala Gln Cys Ala Asp Gly Leu Cys  
20 25 30

Cys Ala Gly Cys Arg Phe Lys Xaa Xaa Arg Thr Ile Cys Arg Arg Ala  
35 40 45

Arg Gly Asp Asn Pro Asp Asp Arg Cys Thr Gly Gln Ser Ala Asp Cys  
50 55 60

Pro Arg Asn Gly Tyr  
65

<210> 15

<211> 73

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Novel Sequence

<400> 15

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Glu Ala Gly Glu Asp Cys Asp Cys Gly Ser Pro Ala Asn Pro Cys Cys  
 1 5 10 15

Asp Ala Ala Thr Cys Lys Leu Leu Pro Gly Ala Gln Cys Gly Glu Gly  
 20 25 30

Leu Cys Cys Asp Gln Cys Ser Phe Met Lys Lys Gly Thr Ile Cys Arg  
 35 40 45

Arg Ala Arg Gly Asp Asp Leu Asp Asp Tyr Cys Asp Gly Ile Ser Ala  
 50 55 60

Gly Cys Pro Arg Asn Pro Leu His Ala  
 65 70

<210> 16

<211> 68

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Novel Sequence

<400> 16

Glu Ala Gly Glu Glu Cys Asp Cys Gly Thr Pro Glu Asn Pro Cys Cys  
 1 5 10 15

Asp Ala Ala Thr Cys Lys Leu Arg Pro Gly Ala Gln Cys Ala Glu Gly  
 20 25 30

Leu Cys Cys Asp Gln Cys Arg Phe Lys Gly Ala Gly Lys Ile Cys Arg  
 35 40 45

Arg Ala Arg Gly Asp Asn Pro Asp Asp Cys Thr Gly Gln Ser Ala Asp  
 50 55 60

Cys Pro Arg Phe  
 65

<210> 17

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

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<220>  
<221> UNSURE  
<222> (40)..(41)  
<223> X is any amino acid

<220>  
<221> UNSURE  
<222> (67)  
<223> X is any amino acid

<400> 17  
Gly Gly Glu Cys Asp Cys Gly Ser Pro Glu Asn Pro Cys Cys Asp Ala  
1 5 10 15  
Ala Thr Cys Lys Leu Arg Pro Gly Ala Gln Cys Ala Asp Gly Leu Cys  
20 25 30  
Cys Asp Gln Cys Arg Phe Lys Xaa Xaa Arg Thr Ile Cys Arg Ile Ala  
35 40 45  
Arg Gly Asp Phe Pro Asp Asp Arg Cys Thr Gly Leu Ser Ala Asp Cys  
50 55 60  
Pro Arg Xaa Asn Asp Leu  
65 70

<210> 18  
<211> 8  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Novel Sequence

<400> 18  
Arg Glu Tyr Val Val Met Trp Lys  
1 5

<210> 19  
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<400> 19  
Cys Arg Gly Asp Met Phe Gly Cys  
1 5

<210> 20  
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<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Novel Sequence

<400> 20  
Cys Arg Gly Asp Met Leu Arg Cys  
1 5

<210> 21  
<211> 8  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Novel Sequence

<400> 21  
Cys Arg Gly Asp Phe Leu Asn Cys  
1 5

<210> 22  
<211> 8  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Novel Sequence

<400> 22  
Cys Asn Thr Leu Lys Gly Asp Cys  
1 5

<210> 23  
<211> 8  
<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Novel Sequence

<400> 23

Cys Asn Trp Lys Arg Gly Asp Cys

1

5

<210> 24

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<212> PRT

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<220>

<221> UNSURE

<222> (5)

<223> X is penicillamine

<400> 24

Cys Arg Gly Asp Xaa

1

5

<210> 25

<211> 8

<212> PRT

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<220>

<223> Description of Artificial Sequence: Novel Sequence

<400> 25

Leu Ser Pro Phe Pro Phe Asp Leu

1

5

<210> 26

<211> 8

<212> PRT

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<223> Description of Artificial Sequence: Novel Sequence

<400> 26

Leu Ser Pro Phe Ala Phe Asp Leu  
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<210> 27

<211> 8

<212> PRT

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<223> Description of Artificial Sequence: Novel Sequence

<400> 27

Leu Ser Ala Phe Pro Phe Asp Leu  
1 5

<210> 28

<211> 8

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Novel Sequence

<400> 28

Leu Ser Pro Phe Pro Phe Asp Ala  
1 5

<210> 29

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Novel Sequence

<400> 29

Ser Pro Phe Pro Phe Asp Leu Leu Leu  
1 5

<210> 30

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Novel Sequence

<400> 30

Gln Leu Ser Pro Ser Pro Asp Leu

1

5

<210> 31

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Novel Sequence

<400> 31

Ser Ile Ile Asn Phe Glu Lys Leu

1

5

<210> 32

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Novel Sequence

<400> 32

Leu Ser Pro Tyr Pro Phe Asp Leu

1

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<210> 33

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Novel Sequence

<400> 33

Ala Ser Pro Phe Pro Phe Asp Leu

1

5

<210> 34  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Novel Sequence

<400> 34  
Ser Ser Phe Gly Ala Phe Gly Ile Phe Pro Lys  
1 5 10

<210> 35  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Novel Sequence

<400> 35  
Ala Asn Glu Arg Ala Asp Leu Ile Ala Tyr Leu Lys Gln Ala Thr Lys  
1 5 10 15

<210> 36  
<211> 17  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Novel Sequence

<400> 36  
Ala Asn Glu Arg Ala Asp Leu Ile Ala Tyr Leu Lys Gln Ala Thr Ala  
1 5 10 15

Lys

<210> 37  
<211> 16  
<212> PRT  
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<220>

<223> Description of Artificial Sequence: Novel Sequence

<400> 37

Ala Asn Glu Arg Ala Asp Leu Ile Ala Tyr Leu Lys Gln Ala Ser Lys  
1 5 10 15